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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,936	05/29/2001	Deane Yang	Kalotay-1	6572

28581 7590 05/29/2007

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EXAMINER	
HARBECK, TIMOTHY M	

ART UNIT	PAPER NUMBER
3692	

MAIL DATE	DELIVERY MODE
05/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/866,936	YANG ET AL.	
	Examiner	Art Unit	
	Timothy M. Harbeck	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *29 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/25/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindahl ("Risk-Return Hedging Effectiveness Measures for Stock Index Futures," The Journal of Futures Markets. New York: Aug 1991. Vol. 11, Iss.4; Pg 399, 11 pgs) in view of Malliaris ("Tests of Random Walk of Hedge Ratios and Measures of Hedging Effectiveness for Stock Indexes and Foreign Currencies," The Journal of Futures Markets. Hoboken: Feb 1991. Vol.11, Iss. ; Pg 55, 14 pages).

Re Claim 1: Lindahl discloses a measure of hedging effectiveness comprising the steps of:

- Determining a standard deviation of a hedged item (See abstract and Introduction)
- Determining a standard deviation of a combination of said hedged item and a hedging vehicle (See abstract and Introduction)
- Determining a ratio between the standard deviation of said hedged item and said standard deviation of said hedged item and said hedging vehicle (See abstract and introduction)

Lindahl does not explicitly disclose the steps wherein said standard deviation of said hedged item, said standard deviation of said hedged item and a hedging vehicle, and the ratio between the two represent changes in value over a known time frame.

Malliaris discloses a test of hedge ratios and measures of hedging effectiveness wherein it is implied that "hedges cannot consistently place perfect hedges and need to continuously readjust their hedges. This can be done by using appropriate computational methods that take into account the variable nature of the hedge ratio and the measure of hedging effectiveness (page 66)." Essentially this an admission that hedged items change over time, and for a hedge ratio to be truly effective, the change in value must be measured over time as well.

It would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Malliaris to that of Lindahl, so a better estimate of hedge effectiveness can be achieved. The computational methods used by Malliaris to take into account the variable nature of the hedge ratio could easily be applied to the ratio disclosed by Lindahl and would provide a better indication of effectiveness than the static measure.

Re Claim 2: Lindahl in view of Malliaris discloses the claimed method supra and while Malliaris does not explicitly disclose the step of determining a volatility measure as a complement to said ratio, Malliaris does hypothesize that volatility is an important factor that is ignored in many hedge ratios. The fact that hedges are variable over time is something that, according to Malliaris, must be factored into any test for effectiveness of hedge ratios (page 66). To do this, Malliaris suggests measuring changes in value

over time, which is essentially a measure of volatility. While not explicitly disclosing that a volatility measure is determined, it could very readily be determined with information available in the Malliaris method and further strengthen the current hypothesis.

Re Claim 3: Lindahl in view of Malliaris discloses the claimed method supra and while the references do not explicitly disclose wherein said known time period is selected from the group of monthly, quarterly and yearly this step would be obvious because those are notoriously well known in the art as fractions of time in which financial instruments are measured.

Re Claims 4-8: Lindahl in view of Malliaris discloses the claimed method supra and while the references do not explicitly disclose the steps of claims 4-8, applicant in his disclosure has admitted these claims as known prior art. These admissions include

- Wherein effectiveness is determined when said ratio is below a known level (Page 2, Paragraph 0105; below 125%)
- Wherein effectiveness is determined when said ratio is above a known level (Page 2, Paragraph 0105; above 80%)
- Wherein said known level is based upon conventional financial considerations (Page 2, Paragraph 0105, Guideline provided by FASB)

Since applicant has admitted that these steps were previously known in the art it would have been obvious to apply them in the same manner to Lindahl in view of Malliaris in order to determine the effectiveness of a hedge ratio.

Re Claims 8-14: Further system claims would have been obvious to perform previously rejected method claims 1-7 respectively and are therefore rejected using the same art and rationale.

Re Claims 15-26: Lindahl in view of Malliaris has been shown in the previously rejected claims 1-7 to disclose the claimed invention. The references do not however discuss the automation of said invention. It would have been obvious to one having skill in the art at the time the invention was made to, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
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